### **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 99.28

# WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-023817 Address: 333 Burma Road **Date Inspected:** 08-Jan-2011

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai

**CWI Name:** Tian Lei **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** OBG

## **Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector R. Hernandez was present during the time noted above and conducted observations relative to the work being performed.

The QA Inspector randomly observed the following work in progress:

Bay Number 1

ZPMC personnel heat straightening Orthotropic Box Girder (OBG) traveler rail components identified as 9TR2-002, 9TR2-001, 9TR1-001, & 9TR1-002. Distortion appeared to be caused by welding. ZPMC Quality Control (QC) inspector identified as Mr. Tian Lei was present to monitor the heat straightening process. The heat straightening appeared to comply with Heat Straightening Report (HSR) no. HSR(B)-404.

Bay Number 3

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. All components were as listed on NWIT notification no. 08097. The member(s) is/are identified as OBG Side Plate and Edge Plate identified as components EP3018-001 & SP3077-001 with the following weld no.(s):

- 1. EP3018-001-006, 007, 018, & 019.
- 2. SP3077-001-096, 097, 098, 099, 100, 101, & 102.

# WELDING INSPECTION REPORT

(Continued Page 2 of 2)

FCAW welding of complete join penetration welds located on Architectural Housing component identified as AH3152A for weld no. 011, 012, 013, & 014. Welder is identified as welder no. 208035. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s) WPS-B-T-2133-ESAB.

SMAW welding of complete joint penetration welds located on Traveler Rail component identified as 20TR2-041 as identified on weld repair data sheet B-CWR-1568 for welds identified as weld no.(s): 009, 011, 013, & 015. Welder is identified as welder no. 058102. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s) WPS-345-SMAW-1G(1F)-FCM-repair.

FCAW welding of complete joint penetration welds located on Traveler Rail component identified as 20TR2-042 as identified on weld repair data sheet B-CWR-1568 for welds identified as weld no.(s): 009, 011, 013, & 015. Welder is identified as welder no. 208035. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s) WPS-345-FCAW-1G-ESAB-repair.

Unless otherwise noted above all items observed on this day appeared to be in general compliance with the applicable contract documents



#### **Summary of Conversations:**

Pertinent conversations are included in the body of the report.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 1500-0042-02372, who represents the Office of Structural Materials for your project.

Inspected By:	Hernandez,Rene	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer